

THE MORNING STAR PACKING COMPANY

724 Main Street, Woodland CA 95695

24 August 2015

Ms. Wendy Wyels Central Valley Regional Water Quality Control Board 11020 Sun Center Drive #200 Rancho Cordova, CA 95670-6114

Dear Wendy,

In response to your communication dated 14 August 2015, which requested a detailed report as to how odor issues arose, the steps taken to prevent odors now and in the future, and analytical data (please see the daily assessment updates) collected during the odor events, please consider the following:

Our mission in our Williams facility this past year was to add new and improved processes and reduce our well-water consumption and water disposal requirements. With any additional processes in a factory (or office), and especially innovative process advancements, comes the necessary risks and challenges of "riding a new bicycle." Advancing at the pace and scale which Morning Star does, and with our desire to excel, it is essential to fail in one direction or another, but from that we find the "sweet spot" of performance. One will never find one's potential until one reaches the point of failure (and keeps pushing the limits). This attitude is, of course, limited to casual failures and not lethal ones.

Based on our experience so far, we recognize some process flow design and operating errors in subsidiary processes and our judgement of our potential to decrease water consumption. While these have lead to excess odors, prior to the design and construction of the new processes, we thought through such potential issues and strongly believe that we have had backup plans for them—some being design and others being operating changes, which I believe are well known industry practices for curing these issues and which I will explain below.



The potential for odors can be attributed to three (3) areas, which include the Cooling Pond, Settling Pond and farm grounds.

As for the Cooling Pond, we innovated these in the industry and in twenty-five years of operation, have never had a problem, however, believing that a particular process change would result in almost perfectly clear condensate (condensed steam in a heater), we plumbed such condensate to discharge directly into the cooling pond. A portion of this change did not work as planned and we were discharging too much tomato organics into the cooling pond. I recognized this a couple of weeks ago from the color of the pond water and figured that additional organics had to be the cause, called and discussed this with a plant engineer and found what was going on and requested that this be modified to discharge into our plant gutter system, but that was a process stop and welding job, which recognizing this on a Friday night, took a few day to accomplish and the pond has since begun to naturally recover its oxygen content. Unfortunately, about five days ago, a major upset in the tomato flow into the plant necessitated a fast shutdown and the operating folks spilt a large tank into the cooling pond. That conditional response has also been modified. Summarizing, we know what happened and we know what to do here and that has been done, but is does take some time for nature to heal itself from our mistakes.

As for the Settling Pond, this is also a feature of Morning Star facilities and have been operated successfully for twenty-five years in our three facilities and copied by others since. However, this is where cutting our water consumption in combination process upsets with new processes requires more learning how to "ride the bike." How do we determine the level of organic matter input and guage the fresh water makeup to maintain the proper balance to deter the buildup of odors?

The very short-term solution to odors, which we took, was to incorporate the very expensive chemical ADOX 750 into the pond and that takes care of it. It is also easy to increase the fresh water flow, but that is contrary to our mission at this facility. We also, by prior design, have installed and put on-line a center pivot sprinkler system, which disburses the water (and consequently the organic matter), very evenly and provides a larger allowance of BOD per acre per day (the implementation of this was a month behind which required us to apply more water to each of the other crops on our farm grounds).

For following seasons, if we find we have too much organic matter to handle on our farm grounds (our number say we should be fine), we could install standard technology for decreasing the BOD through a DAF tank or various filtering systems.

The farmgrounds are being irrigated via flood irrigation and pivot sprinkler irrigation. We are continuously moving washwater to fields to irrigate agronomically and to spread as evenly as possible for the production of crops. However, there is always an unavoidable slight odor of tomato water adjacent to our ditches and the fields being irrigated. We have recently added, with the operability of the pivot irrigation system, approximately forty percent (40%) more land for irrigation, which should certainly help decrease or eliminate the source of odors from the farm grounds.

In addition, we have been successful in reducing our well-water consumption by approximately one-third (1/3), and when we put on line a small cooling tower to cool condensate water shortly, we expect to save another third, totaling two-thirds of our prior consumption. With the investment in water filtering equipment (quite expensive, however), eliminate all well-water consumption, other than for start-ups and emergencies. I expect to take the technology and knowledge gained from Williams to our other facilities in the near future. If it weren't for restrictive laws, regulation and bureaucracy, we would be capable of supplying fresh water to the residents of a city of approximately 75,000 people.

In summary, we believe we recognize the issues and we are committed, capable and active in resolving them in due haste. I am very used to criticism and ridicule for our mistakes, but they emanate from our desire to advance and excel (with proven final performance relative to others in our business)—not from lack of care and consideration for getting it right for all parties. In addition, we will save a whole bunch of groundwater—which the Governor said was a priority.

Respectfully yours,

Chris Rufer